



State Fire Marshal Inspection Checklist Proximate Audience Pyrotechnics

Code Section
2006 Edition of NFPA 1126

- ___ Review safety plans and procedures and personal protective equipment
- ___ Changes in pyro show approved by State Fire Marshal
- ___ Live demonstration can be required by Authority Having Jurisdiction prior to approval
- ___ Pyro operators and technicians at least 21 years old
- ___ Pyro assistants at least 18 years old
- ___ Permit posted at control site, including insurance certificate & MSDS
- ___ Pyro operators and technicians shall wear protective glasses and clothing during mixing and loading operations
- ___ Pyrotechnic operators and technicians have licenses on their person

NFPA 1126 6.2.1
NFPA 1126 6.3.1
NFPA 1126 6.2.3
NFPA 1126 6.4.1.1
NFPA 1126 6.5.1
NFPA 1126 6.5.2
SCRR 71-8305.6(C)(2)
NFPA 1126 8.5.7
SCRR 71-8305.6(A)(1)

Storage

- ___ Storage area at least 50 feet from unprotected heat source
- ___ Separate lockable room or facility for pyro preparation and storage (Additional storage requirements per NFPA 1126 8.5.3.1)
- ___ Pyro storage area neat and orderly, free of combustibles
- ___ No smoking within 25 feet
- ___ Magazine log available for inspection one hour before each performance

NFPA 1126 5.3.1
NFPA 1126 8.1.3
NFPA 1126 8.5.1
NFPA 1126 8.5.5.1
SCRR 71-8305.6(A)(4)

Fire Alarm System & Fire Watch Personnel

- ___ Automatic fire alarm system required
- ___ Smoke detectors zoned so that areas effected by pyro can be zoned out
- ___ Fire alarm smoke detection systems may be bypassed, only with approval of the AHJ, owner or agent & with an approved fire watch provided
- ___ In the event of the fire alarm systems is bypassed the fire department shall be notified and a representative present for demonstration
- ___ Fire watch personnel on duty at all times while detection equipment is disabled
- ___ Fire watch personnel Wear orange shirt or vest with "FIRE WATCH" on front and back in 3 inch letters
- ___ Override switch provided at the firing point and in control room with flashing light to shut off stage sound and make public address system available for evacuation instructions
- ___ No smoking within 25 feet of firing area
- ___ Pyro operators & assistants wear safety glasses & protective clothing applicable to hazards associated with material being handled
- ___ Smoke developed during display shall not obscure exit signs, paths, or doors
- ___ Minimum of two pressurized water extinguishers and two class 10 BC fire extinguishers available near pyrotechnics
- ___ Personnel trained in the use of portable fire extinguishers present while pyro used, present, or removed
- ___ Fire extinguisher placement requirements

SCRR 71-8305.6(C)(7)
SCRR 71-8305.6(C)(7)(a)
NFPA 1126 8.1.6.1
NFPA 1126 6.4.3.1
NFPA 1126 8.7.7
SCRR 71-8305.6(C)(6)
SCRR 71-8305.6 (C)(7)(b)

NFPA 1126 8.5.5.1
NFPA 1126 8.5.7
NFPA 1126 8.6.6
NFPA 1126 8.1.1.1
NFPA 1126 8.1.2
NFPA 1126 8.1

General Pyrotechnic Requirements

- ___ All pyro devices used labeled by manufacturer as to use and effect
- ___ Binary agents mixed but not used shall be stored as an explosive
- ___ All binary effects/systems marked by manufacturer
- ___ Binary materials listed by manufacturer for indoor use
- ___ Pyro devices securely mounted
- ___ Pyro firing equipment approved for specific use
- ___ Pyro effects on humans shielded from body
- ___ Binary systems mixed one at a time
- ___ Firing systems have two step interlock to prevent accidental firing
- ___ All pyro firing areas shall be in clear view of pyro operator or assistant with direct communications with operator
- ___ Concussion mortars secured from public and support personnel
- ___ Concussion mortars at least 25 feet from audience
- ___ Trajectory of comets/mines not over audience
- ___ Airbursts over audience be secured, minimum height of 3X the diameter of the effect, & no sparks within 15 ft. of the floor
- ___ Waterfall effect area to be free of flammable materials
- ___ Glowing or flaming particles at least 10 feet from audience
- ___ Distance of audience at least 2 X the fallout radius but not less than 15 feet Whichever is greater expected when approved by AHJ

NFPA 1126 7.1 (1)
NFPA 1126 5.1.2
NFPA 1126 7.2.1
NFPA 1126 7.4.2
NFPA 1126 8.2.1
NFPA 1126 8.2.2.1
NFPA 1126 8.2.2.3.1
NFPA 1126 8.2.3.1
NFPA 1126 8.3.3
NFPA 1126 8.3.5.1
NFPA 1126 8.3.7
NFPA 1126 8.4.2
NFPA 1126 8.2.10
NFPA 1126 8.2.13
NFPA 1126 8.2.11
NFPA 1126 8.4.3
NFPA 1126 8.4.1

Minimum Local AHJ Inspection Responsibilities

- ___ Facility thoroughly inspected per proper fire code, all violations corrected
- ___ Inspection of the proximate audience display. At a minimum inspection shall cover the requirements listed
- ___ Fire Lane kept clear
- ___ Hydrants not blocked
- ___ Fire Department Connections clear and accessible
- ___ All exits clear and accessible
- ___ Adequate exits for the number of persons attending the show
- ___ Fire extinguishers charged/inspected and in good working order
- ___ Ensure all electric wiring and connections are in good condition
- ___ Appropriate power supplies provided
- ___ All set and scenic materials appropriately treated with flame retardant in accordance with NFPA 701

NFPA 1126 Annex B
IFC(2006) 503.4
IFC(2006) 508.5.4 & 508.5.5
IFC(2006) 912.2.1 & 912.3
IFC(2006) 1003.6 & 1015.2
IFC(2006) 1015
NFPA 10(2007) 6.1.2
IFC(2006) 605.1
NFPA 1126 8.3.2.1
IFC(2006) Chapter 8

Post Show Requirements

- ___ Inspect all pyrotechnic devices to confirm firing
- ___ Return unfired devices to approved storage and repackage for transportation or disposed per manufactures requirements
- ___ File misfire report on any misfires (if necessary)
- ___ Fire watch shall remain present until the fire alarm and other life safety systems have been restored

NFPA 1126 8.7.1.1
NFPA 1126 8.7.2
SCRR 71-8305.6(B)(4)
NFPA 1126 8.7.7